Human Resources Management

Overview and Summary Information
All Viewpoint-1 (AV-1)

November 2013

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1. ALL VIEWPOINT-1 (AV-1): OVERVIEW AND SUMMARY INFORMATION

1.1 Architecture Project Identification

Name: Human Resources Management (HRM) Enterprise Architecture (EA)

Sponsor: Under Secretary of Defense for Personnel and Readiness (USD(P&R))

Developing Organization: Personnel and Readiness Information Management (P&R IM)

1.2 Introduction

The Overview and Summary Information All Viewpoint-1 (AV-1) document provides a high-level overview of the HRM EA and related work products. The AV-1 defines the purpose, scope, objectives, and architectural approach necessary to build and integrate the HRM EA. The AV-1 identifies the Key Performance Parameters (KPP), core processes and relationships to other architectures, limitations and constraints. The structure and content of the HRM EA are based on the Department of Defense (DoD) Architecture Framework (DoDAF) guidelines.

1.3 Purpose

The purpose of the HRM EA is to support the various analytical processes that enable HRM transformation, including, but not limited to:

- Continuous process improvement/business optimization/business process re-engineering
- Information standardization and information management
- System certification and investment management
- Information technology (IT) portfolio analysis

Additionally, the HRM EA:

- Provides an "Overarching" framework that aligns architectures within the human resources (HR) community to the strategic goals of the DoD, P&R and the business owners; while allowing for development and enhancement of future HRM initiatives and programs.
- Serves as a blueprint to improve/optimize, re-engineer, and integrate HRM best practices to implement solutions in response to emerging business needs.
- Serves as a common lexicon of HR operational activities, capabilities, system functionality, and operational roles across DoD.
- Fosters interoperability and net-centricity among HRM, DoD, other federal agencies and business partners.
- Aligns and integrates the HRM architecture to the Business Enterprise Architecture (BEA).
- Identifies touch points or linkages between Component, HRM, Enterprise, and Federal Architectures.

- Supports BEA compliance review.
- Supports HRM portfolio and BEA End-to-End (E2E) business flow analysis.
- Serves as Capstone Architecture for HRM.

1.4 Scope

The USD(P&R) is the functional sponsor for HRM. HRM consists of three Sub-Mission Areas: Civilian HRM, Military Health System (MHS), and Military and Other HRM. HRM includes all the functional areas under the auspices of the USD(P&R) including the following Lines of Business (LoBs):

- **Recruiting and Accessions** – All activities associated with recruiting, identifying, evaluating, and selecting a candidate(s) to fill a position or organizational requirement, hiring/accessing, transferring, and assigning or placing DoD members and employees against positions (e.g., planning and identifying placement requirements, determining candidate eligibility and suitability, in-processing selected candidate, and accepting individuals into DoD).
- **Assignment/Placement/Transfer** – All activities associated with assigning, placing against positions (e.g., planning and identifying placement requirements, determining candidate eligibility and suitability, providing placement advisory services, processing placement actions), and/or transferring DoD members and employees.
- **Travel Management** – All activities associated with authorizing and documenting all types of official travel (e.g., initial hire/first duty station travel, temporary duty (TDY) travel, and permanent change of station (PCS) travel). This includes verifying a travel authorization, required documentation, and traveler's eligibility and credentials (e.g., security clearance, passport, visa, foreign area clearance); initiating and finalizing travel requests and authorizations; gathering information necessary to create a travel authorization for individual or group travel; verifying funds availability; arranging travel accommodations (e.g., airlines, rental car, lodging); estimating travel costs; and completing and issuing travel authorizations to the traveler and accounting to obligate funds.
- **Personnel/Pay Management** – All activities associated with managing HR including providing support and visibility across the full operational spectrum – during peacetime and war, through mobilization and demobilization, for deployment and redeployment, while assigned in a theater of operation and at home base, capturing and maintaining accurate and timely data. This includes the performance of personnel actions (including, but not limited to, assignments, promotions) necessary to support DoD members and employees, determining eligibility for pay and deductions, executing payroll, certifying and building a pay file for disbursing, reporting taxes, providing information to support mission planning, personnel and pay oversight, and financial reporting.
- **Personnel Development** – All activities associated with enhancing an employee's or member's personal and professional skills including functions that support managing careers, competency development, evaluations, promotions, and recognition programs (e.g., incentives, bonuses, awards).

- **Law Enforcement** – All activities associated with protecting people, places, and things from criminal activity resulting from non-compliance with United States (U.S.) laws. This includes patrols, undercover operations, response to emergency calls, as well as arrests, raids, and seizures of property.
- **Legal Affairs** – All activities associated with resolution facilitation and the administration of adverse actions (judicial and non-judicial). Resolution facilitation refers to those activities outside a court of law, such as mediation and arbitration that may be used in an attempt to settle a dispute between two or more parties (government agency, citizen, or corporation). Adverse actions can be based upon misconduct, unacceptable performance, or both, and can lead to legal actions and non-disciplinary actions.
- **Human Resources Information Security** – All activities associated with ensuring employees, contractors, and other designated persons have been approved and issued badges to enter federal buildings, utilize federal services, and serve in positions requiring certification of personal reliability. This activity also includes determining and tracking individual personnel security clearances as well as supporting the National Industrial Security Program.
- **Position Management** – All activities associated with developing, analyzing, and implementing position plans, managing strength levels against those plans, and accepting individuals into DoD. In addition, all activities associated with matching a candidate's qualifications against established criteria, hiring and assigning against authorized/funded positions. All activities associated with integrating force structure requirements into personnel functions enabling proper utilization of DoD human resources through structuring organizations, validating organizations against budgetary constraints, establishing and allocating positions, and managing programs required to support the P&R strategic goals.
- **Military Health Services Management** – All activities associated with providing direction, resources, health care providers, eligibility, enrollment, and other means necessary to promote the health of the DoD TRICARE beneficiary population. This includes developing and promoting health awareness issues to educate customers, discovering and resolving environmentally-based health threats, providing health services, including preventive care and problem intervention, and improving the means and methods for maintaining the health of the beneficiary population by constantly evaluating the performance of the health care services system.
- **Quality of Life/MWR Programs** – All activities associated with maintaining or improving personnel's quality of life. This includes supporting morale, welfare and recreation (MWR), family support, and casualty assistance.
- **Inter-Agency Support** – All activities associated with responding to policy, procedural and process issues and requirements with outside agencies that have an impact on the benefits, entitlements, and well-being of human resources.
- **Retirement/Separation** – All activities associated with discharging, dismissing, retiring, and resigning DoD members and employees. In addition, managing military retirees for recall and their retention/retired pay and military annuitant pay requirements and operations (which contain payments to retirees, annuitants, former spouses, etc.).

- **Benefits Management** – All activities associated with managing benefits to include indirect compensation, wage supplements, and indirect payments. This includes: medical, dental, life and long-term insurance; pension/retirement; flexible spending; disability benefits; entitlements; benefits eligibility, enrollment and termination; tracking of health care administrators; savings management (Thrift/Bonds); ad hoc benefits reporting.

The HRM EA describes all activities that support DoD personnel and family members (throughout their careers and beyond) and that enable effective management of DoD personnel. Additionally, the HRM EA describes the full operational spectrum – peacetime and war, through mobilization and demobilization, deployment and redeployment, in theaters of operation and at home bases – capturing and maintaining accurate and timely information. Within each of their respective government categories (i.e., uniformed Service member, government civilian employee, or government contractor), data is retained in a single, comprehensive record of service that is available to employees, contractors and Service members as well as senior leadership, combatant commanders, and authorized users throughout DoD and other federal agencies.

Strategic planning documents guide HRM EA development. These include the USD(P&R) Strategic Plan (http://prhome.defense.gov/DOCS/ file name: *FY2012-2016 Strategic Plan Final (Plan).pdf*) and additional strategic planning documents that can be found on the P&R IM website (**http://www.prim.osd.mil/**).

The HRM EA, which is based on Subject Matter Expert (SME) input and analysis, provides detailed and precise business capabilities.

1.5 Key Performance Parameters

The HRM EA documents KPPs, as outlined in the Global Information Grid Capstone Requirements Document (GIG CRD), that are essential for achieving interoperability. The KPPs necessary for interoperability fall within seven fundamental functions (process, store, transport, human-GIG interaction, network management, information dissemination management, and information assurance). The GIG CRD delineates the capabilities that are critical for interoperability for a globally interconnected, E2E, interoperable, secure system of systems that will support the National Command Authorities (NCA), warfighters, DoD personnel, intelligence community (IC), policy makers, and non-DoD users at all levels involved in both military and non-military operations. A listing of the KPPs from the GIG CRD can be found in **Appendix A – Key Performance Parameters Listing.** This table identifies the functional areas, capabilities, and KPP requirements critical to the implementation of the HRM EA.

2. ARCHITECTURE AS A BUSINESS IMPROVEMENT TOOL

The overall goal of the Department's transformation initiative is to have reliable, accurate, and timely information upon which to make the most effective business decisions. The scope of this initiative encompasses those Defense policies, processes, people, and systems that guide, perform, or support all aspects of business management. The purpose of the HRM EA is to enable necessary improvements to facilitate the future business enterprise. The HRM EA will:

- Provide a structured, common framework for analyzing business capabilities, activities, processes, and data.

- Enhance DoD business enterprise clarity.
- Develop horizontal and vertical business improvement focus by optimizing E2E processes, not stovepipes.
- Provide business alignment to warfighter needs, aligning to the mission of the Department, and using this alignment to drive urgency.
- Allow for capabilities, not systems, as deliverables.
- Establish accountability for ensuring the development of architectures and identification of capabilities at the appropriate level - component, HRM, and Business Mission Areas (BMA).

The USD(P&R) is responsible for the HRM portion of the BEA and the Investment Priority Management of HRM systems supporting the Sub-BMAs, Component, and program levels.

The USD(P&R) certifies HRM portfolio investments based on the following governance principles:

- The HRM and the Sub-BMA IT systems are aligned with and promote the achievement of DoD strategic goals and objectives.
- The HRM and Sub-BMAs are aligned with DoD's BEA structure and are consistent with the Department's business transformation effort.
- The HRM and Sub-BMAs' governance will be integrated with Departmental decision-making processes.

3. HRM GOVERNANCE AND RESPONSIBILITIES

The HRM Core Business Mission falls under the auspices of USD(P&R). Three sub-core BMAs comprise HRM: Military Health, Civilian HRM, and Military and Other HRM.

The Director of P&R IM serves as the HRM Manager. Senior executives/managers from each sub-core BMA will represent the sub-core BMAs in the governance structure. The HRM Charter defines the HRM governance and responsibilities.

The P&R IM key stakeholders provide HRM with a set of unique requirements for their architecture. In turn, HRM provides the stakeholders with a solution for federating their architecture to align with the standards for BEA. The following are the key stakeholders for P&R:

- Office of the Secretary of Defense (OSD)
    - USD(P&R)
    - Principal Deputy Under Secretary of Defense (Personnel & Readiness)
    - Assistant Secretary of Defense (Health Affairs)
    - Assistant Secretary of Defense (Reserve Affairs)
    - Deputy Assistant Secretary of Defense (Readiness)

    - Deputy Assistant Secretary of Defense for Military Personnel Policy
    - Deputy Assistant Secretary of Defense for Civilian Personnel Policy
    - Deputy Assistant Secretary of Defense for Military Community and Family Policy
    - Director, Office of Diversity Management and Equal Opportunity (ODMEO)
    - Program Executive Officer for DoD Human Capital Strategy
    - Under Secretary of Defense (Comptroller) and Chief Financial Officer
    - Under Secretary of Defense (Acquisition, Technology, and Logistics)
    - DoD Chief Information Officer
    - Director, Cost Analysis and Program Evaluation (CAPE)
- Joint Staff
    - Chairman, Joint Chiefs of Staff
    - Director of Manpower & Personnel, Joint Staff
    - Director of Intelligence
    - Director of Operations
    - Director of Logistics
    - Director of Strategic Plans & Policy
    - Director, Command, Control, Communications and Computer Systems
    - Director of Operational Planning & Interoperability
    - Director of Force Structure, Resources & Assessments
    - Commander, Africa Command
    - Commander, Central Command
    - Commander, European Command
    - Commander, Northern Command
    - Command, Pacific Command
    - Commander, Special Operations Command
    - Commander, Southern Command
    - Commander, Strategic Command
    - Commander, Transportation Command
    - Commander, U.S. Joint Forces Command
- Department of the Army
    - Secretary of the Army
    - Assistant Secretary of the Army (Manpower and Reserve Affairs)

    - Assistant Secretary of the Army (Financial Management and Comptroller)
    - Chief of Staff, Army
    - Army Deputy Chief of Staff/G-1
    - Army Chief Information Officer/G-6
    - Army Surgeon General
    - Chief, Army Reserve
    - Chief, National Guard Bureau
    - Director, Army National Guard
- Department of the Air Force
    - Secretary of the Air Force
    - Assistant Secretary of the Air Force (Manpower and Reserve Affairs)
    - Assistant Secretary of the Air Force (Financial Management and Comptroller)
    - Chief of Staff, Air Force
    - Deputy Chief of Staff, Personnel, Air Force
    - Chief Warfighting Integration and Chief Information Officer
    - Air Force Surgeon General
    - Chief, Air Force Reserve
    - Chief, National Guard Bureau
    - Director, Air National Guard
- Department of the Navy
    - Secretary of the Navy
    - Assistant Secretary of the Navy (Manpower and Reserve Affairs)
    - Assistant Secretary of the Navy (Financial Management and Comptroller)
    - Department of the Navy Chief Information Officer
    - Navy Surgeon General
    - Chief of Naval Operations
    - Chief of Naval Personnel
    - Deputy for C4 Integration and Policy/DoN Deputy Chief Information Officer (CIO) (Navy) (OPNAV N6F), and Navy CIO
    - Commander, Navy Reserve Forces
- United States Marine Corps
    - Commandant, Marine Corps
    - Deputy Commandant for Manpower and Reserve Affairs, Marine Corps

- Director for Command, Control, Communications, and Computers (C4), and CIO for the Marine Corps
- Commander, Marine Forces Reserve

– Department of Veterans Affairs
  - Secretary of Veterans Affairs
  - Deputy Secretary of Veterans Affairs
  - Under Secretary for Health
  - Under Secretary for Benefits
  - Under Secretary for Memorial Affairs
  - Assistant Secretary for Information and Technology

4. CONTEXT OF HRM EA

The HRM EA has been developed to fully support and align to the vision and mission of the USD(P&R), and will embrace the HRM transformation goals, core processes, and relationships with other architectures.

4.1 Goals

The major USD(P&R) HRM strategic goals are:

– Integrate the Active and Reserve military, civilian employees, and contractors into a diverse, cohesive Total Force and rapidly tailorable force structure.

– Attract, retain, and motivate a high-quality, diverse, and sufficiently sized force to meet mission requirements.

– Provide management systems that support Total Force (military and civilian) planning and personnel visibility.

– Provide appropriate education, training, and development of the Total Force to meet mission requirements.

– Support the readiness of the Total Force for peacetime, contingency, crisis, and warfighting.

– Provide high-quality, responsive, and accountable health services to ensure force health protection and optimize the health of beneficiaries.

– Support the warfighter by deploying ready and capable medical forces that effectively use technology to enhance force health protection.

– Use beneficiary needs as the driving force for policy decisions relative to healthcare accessibility, quality, cost effectiveness, and positive health outcomes.

5. P&R MISSION AND ARCHITECTURE VISION

5.1 Architecture Mission

The USD(P&R) is responsible for the DOD core business mission of HRM. This encompasses all HR-related processes necessary to recruit, train, and prepare personnel to populate warfighter and support organizations. This includes providing trained, healthy, and ready personnel to combatant and combat support organizations and ensuring timely and accurate access to all applicable compensation and benefits for all DoD personnel. The USD(P&R) supports continuous process improvement and, through FY 13, certified all HRM IT systems.

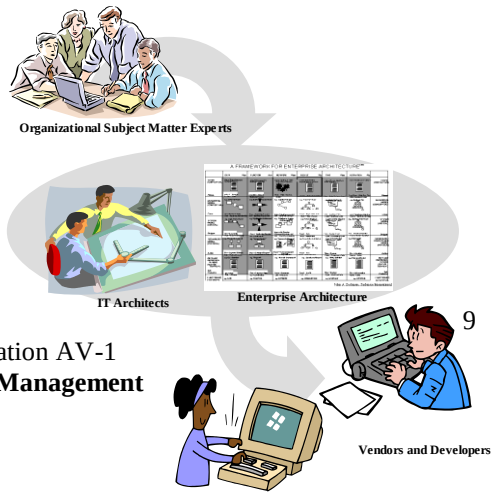
The HRM community supports military members and their families, civilian employees, warfighters, DoD contractors, decision-makers, and the medical, travel, and law enforcement communities, pursuing initiatives that reflect commitment to all of those who are serving as well as those who have served. The USD(P&R) sponsors the development and fielding of systems and business practices for these customers. These systems and business practices support a diverse, cohesive Total Force and rapidly tailorable force structure, and deliver quality health services and travel management that meet the readiness needs of the Services.

P&R has the responsibility for key initiatives that directly impact and improve personnel management and readiness throughout the DoD. The goal is to improve and transform HRM business practices and information systems to better support the Service members, DoD military and civilian employees, the warfighter, and others with a Total Force approach.

HRM is the fusion of accurate human resources information, with respect to manpower, competencies (occupations, skills, education, and training), perception, accounting, individual readiness, patient accountability and status reporting, Service member unit and location, and assigned duty within organizations. This includes ensuring timely and accurate access to compensation and benefits for DoD personnel and their families and that Combatant Commanders have access to the timely and accurate data on personnel and their skill sets. Supporting warfighters with the right types of people, in the appropriate quantity, at the right place and time will significantly increase the opportunity for mission success.

5.2 Architecture Vision

The P&R architecture vision is for the HRM EA to support continuous process improvement and to serve as a blueprint to improve/optimize, reengineer, and integrate HRM best practices to implement solutions that result in providing world class support to the warfighter and other DoD customers while providing savings to the American taxpayer.



6. ENTERPRISE ARCHITECTURE DEVELOPMENT

The enterprise architecture development "process" involves a dedicated group of business analysts, IT

planners, and technologists called "enterprise architects." Enterprise architects create an architecture framework that fully describes the HRM business to enable the development or evolution of IT capabilities to better serve the enterprise. These planners work directly with organizational SMEs to document the business processes and organizational needs of the enterprise. By translating these business needs and processes into *models,* architects create a critical communications bridge between SMEs and solution providers.

These enterprise-wide models are:

- Comprehensive
- Rigorously developed
- Well-vetted
- Re-usable
- Industry-standard notation
- Human interpretable
- Well understood

To best achieve this vision, EA documents relevant DoDAF views and ontology in an appropriate level of granularity to enable the enterprise to achieve its transformational goals. This will yield an EA that facilitates:

- Lower IT costs though more efficient leveraging of capabilities
- More effective service to the Enterprise
- Better alignment of systems to processes in order to support business capabilities
- Better leverage of enabling technologies
- Movement toward data-centrism and net-centricity

7. LINKAGES TO OTHER ARCHITECTURES

The HRM EA is developed based on DoDAF Version 2.0. The primary enterprise architectures related to the HRM EA consist of:

- Information Enterprise Architecture (IEA), Version 2.0, August 10, 2012
- DoD BEA, Version 10.0, March 2013
- Federal Enterprise Architecture (FEA) Consolidated Reference Model, Version 2.3, October 2007
    - Business Reference Model (BRM), Version 3.0, June 25, 2012
    - Service Component Reference Model (SRM), Version 2.3, October 2007
    - Technical Reference Model (TRM), Version 2.3, October 2007
- Component Enterprise Architectures
- Defense Civilian Personnel Advisory Service (DCPAS) Enterprise Architectures

- MHS Enterprise Architectures
- Military and Other HRM Enterprise Architecture is fully integrated into the HRM EA.

7.1 Relationship with the GIG

The GIG supports all DoD, National Security, and related IC missions and functions (strategic, operational, tactical, and business) in war and peace. The GIG includes the globally interconnected, E2E set of information capabilities, associated processes, and personnel for collecting, processing, storing, disseminating, and managing information on demand to warfighters, policy makers, and support personnel. The GIG includes all owned and leased communications and computing systems and services, software (including applications), data, security services, and other associated services necessary to achieve Information Superiority.

The GIG architecture, composed of interrelated operational, systems and technical views, defines the characteristics of and relationships among current and planned GIG assets in support of National Security missions. The GIG architecture, developed in accordance with the standards defined in DoDAF and using the definitions contained in the GIG reference model, incorporates all major organizational relationships, information flows, enterprise networks, systems configurations, and technical standards pertaining to the design, acquisition, and operation of the GIG. Initial releases of the GIG architecture have focused mostly in the Theater environment.

7.2 Relationship with DoD BEA

The Office of the Deputy Chief Management Officer (ODCMO) is responsible for integrating the Department's core business missions' EA into a BEA. The BEA is used in the DoD's business management modernization efforts. The BEA is the blueprint to transform the Department's business operations and leverage systems and technologies to enable this comprehensive change. The BEA is a fully integrated System of Systems (SOS) DoD-wide enterprise architecture. It is compliant with the DoDAF Version 2.0 and consistent with the DoD enterprise GIG architecture.

The purpose of the BEA is to provide a blueprint for DoD business transformation that helps to ensure that the right capabilities, resources, and materiel are rapidly delivered to the warfighters: what they need, where they need it, when they need it, anywhere in the world.

The HRM architecture represents the HRM portion of the BEA. It is fully integrated with the BEA through linkages to BEA umbrella activities in the OV-5. HRM architecture extensions provide complete traceability to the atomic standards, capabilities, and enterprise requirements of the enterprise. HRM architecture provides linkages to the warfighters, Components, and Sub-Mission Areas.

7.3 Relationship with FEA

The FEA is being developed by the Office of Management and Budget (OMB) to facilitate efforts to transform the federal government to one that is citizen-centered, results-oriented, and market-based.

The FEA is being constructed through a collection of interrelated "reference models" designed to facilitate cross-agency analysis and the identification of duplicative investments, gaps, and opportunities for collaboration within and across federal agencies. Collectively, the reference

models comprise a framework for describing important elements of the FEA in a common and consistent way. Through the use of this common framework and vocabulary, IT portfolios can be better managed and leveraged across the federal government. The FEA is the cornerstone for the design, development, and implementation of information resources government-wide.

Linkages from the FEA to the HRM EA are both implicit and explicit. As the HRM EA is being developed the FEA is being considered with respect to the overall framework. The FEA is one of many references used to ensure that the HRM EA is complete, accurate, and compatible with other HRM business frameworks. The HRM EA links to the FEA using the same umbrella activities in the OV-5 that are mapped to the BEA. Due to the specifics of the DoD operating environment some of the naming conventions can and do differ. Therefore, linkages to the FEA are explicitly catalogued in the HRM BRM.

8. ARCHITECTURE VIEWPOINT AND PLAN

Architecture viewpoints represent the primary goals of, or questions posed to, the architecture. These viewpoints drive the ultimate form of the architecture, including specific DoDAF view requirements, granularity decisions, and notation choices.

The HRM EA includes specific products to support multiple view points; Investment Review, Investment and Portfolio Management, data management, and in part, system development. The overall objective is to support interoperability, integration, migration, and information assurance decision requirements with respect to DoD and Core Business Missions(CBMs).

These viewpoints support:

- Development of a common lexicon for operational activities, system functions, and operational roles across the HRM EA
- Business process analysis to support continuous process improvements within the HRM community
- System analysis to support Investment Review Board (IRB), acquisition, and other portfolio analyses
- Long-range IT transition planning
- Data management to support net-centricity

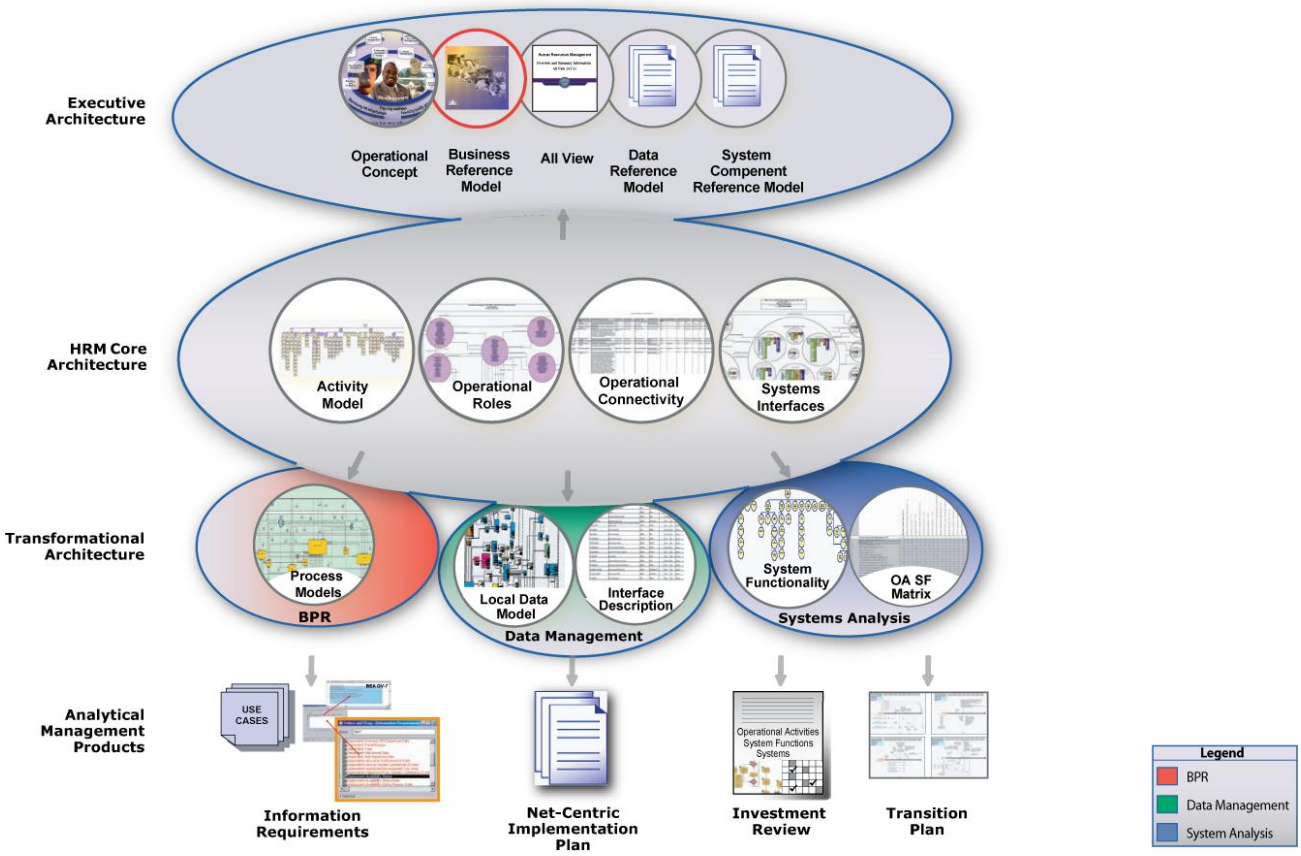


Figure 8-1 HRM Core Architecture and Supporting Products

Figure 8-1, "HRM Core Architecture and Supporting Products," depicts the logical relationship between the "core" HRM EA products and those products developed specifically to support a particular architectural viewpoint. These core products remain essentially the same even if new or different viewpoints require support. Essentially, the integration built into a DoDAF-architecture means that adding or subtracting architectural viewpoints would not require redoing the core architecture rather it would require the creation of extensions to the core products and the development of subsidiary products.

8.1 Common Lexicon

One of the primary goals of the HRM EA is to establish a common vocabulary for operational activities, system functions, operational nodes, data entities, and other architectural building blocks. Currently, system architectures, when constructed, are based upon non-standard naming conventions, sometimes using the FEA, sometimes using Component conventions, often using whatever the developer decides upon. In the absence of a comprehensive set of common names, it becomes difficult to equate (or map) system architectures against a common enterprise architecture. By following the naming conventions described in the HRM EA, systems and initiatives can be more accurately understood, both by the enterprise and by peers.

8.2 Business Analysis

The Business Process Reengineering/Business Process Improvement (BPR/BPI) approach used by P&R IM is consistent with the Continuous Process Improvement (CPI) framework established by the Deputy Secretary of Defense in his May 11, 2006 memorandum, and uses many of the same techniques to identify and address process improvement. Consistent with both frameworks is the requirement to establish the mission, vision, and strategic plan to drive the effort from inception through implementation. Indeed both plans emphasize the connection between having an identifiable mission and strategy and achieving success.

During BPR/BPI efforts, P&R IM commonly engages in:

- Strategic planning
- Documenting and communicating vision and goals
- Identifying performance lapses that inhibit the achievement of the vision and goals
- Developing "As-Is" and "To-Be" EA products to include Operational, System, and Technical Views
- Identifying the information requirements needed to support future processes (including net-centric data sharing)
- Data modeling (including data standardization) associated with activity modeling
- Benchmarking to identify and evaluate leading practices and their application to the Department
- Developing functional economic analyses
- Setting performance targets
- Planning the BPR/BPI implementation
- Conducting analysis to select, modify, or migrate appropriate systems and software to support BPR/BPI objectives and outcomes
- Establishing evaluation methods to assess success relative to the performance targets and inspire a culture of continued improvement

This BPR/BPI approach will be used to support the HRM EA development of both "As-Is" and "To-Be" architectures; it will also be used to identify areas of future architecture development.

8.3 Systems Analysis

System evolution of a structured, architecture-based IT systems analysis process allows the evaluation of existing (legacy) IT capabilities in a comprehensive manner. Over time, most IT environments have become increasingly complex, stove-piped, and filled with redundant systems. The implementation of strict management controls is necessary to "rationalize" these complex and duplicative environments.

8.4 Investment Priority Management Analysis

The HRM architecture-based investment priority management process will be able to link the strategic goals and functional needs of the enterprise with the technology that satisfies them. A particular challenge is dealing with an IT environment that currently contains approximately over 1000 different systems (according to the DoD Information Technology Portfolio Repository (DITPR)).

Additionally, the investment priority management processes will be closely aligned with DoD and Federal directives, including the National Defense Authorization Acts (NDAA) and Management Initiative Decision 918 (MID-918). This includes a governance structure based on common principles for:

- OUSD(P&R) guidance
- Stakeholder participation
- Collaborative decisions
- Decentralized execution and delivery of information capabilities and services

The HRM portfolio analysis approach is based upon a migration planning process that addresses the migration from the existing legacy environment to a managed portfolio of IT capabilities.

8.5 Data Management

The HRM EA will provide critical linkages to HRM net-centric data-sharing plans. The EA will provide insight into the capabilities, systems, and data that HRM will use as a foundation to create plans and policy for data-sharing in a net-centric environment.

Metadata management will be an integral part of HRM data strategy and management, and will provide the framework identifying, tagging for discovery, and sharing appropriate data assets.

Data stewardship is the responsibility of the Functional Data Working Group (FDWG). The FDWG includes a mix of data producers and data consumers. Members of the group will include representatives from each of the Services and other stakeholders who will manage the development, approval, creation, and use of the data. The designated representatives will ensure that the data is properly administered and able to be shared throughout DoD.

Security and privacy policies will be reflected in the Data Management Strategy Plan to ensure these policies are met.

8.6 HRM Ontology

The HRM domain ontology is a complement to the HRM EA. Using the Web Ontology Language (OWL), it captures and integrates content from the HRM EA and Enterprise Standards (ES) (business rules and supporting Common Human Resources Information Standard (CHRIS)). The HRM domain ontology documents the necessary and sufficient conditions for class membership and describes the data properties supporting business rules and operational activities in business processes. Ultimately, the OWL ontology models will be used to access system data that is exposed net-centrically as SPARQL Protocol and RDF Query Language

(SPARQL) endpoints. The HRM domain ontology will be capable of being functionally federated with ontologies created by the other stakeholders in the HRM and DoD community.

Additionally, an EA meta-model ontology will be developed to capture in federatable, queryable OWL form information contained in DoDAF- and business process modeling notation (BPMN)-compliant products created by P&R IM and other HRM stakeholders. This meta-model content can be used to supplement the analyses of program- and system-level architectures early in their life cycle (pre-milestone A) as well as at key IRB decision points.

9. HRM EA VIEWS AND PRODUCTS

The HRM EA will consist of only those DoDAF products required to support specific analytical processes. Table 9-1 **HRM DoDAF Products** shows the specific products currently under development.

9.1 Role of All Viewpoint (AV) Products

The AV products consist of an executive summary, global vision, an overview of architecture from an enterprise collaborative view of all products, and a central source for definitions used in the HRM EA products. The Overview and Summary Information (AV-1) and the Integrated Dictionary (AV-2) are both considered essential to the HRM EA.

9.2 Role of Capability Viewpoint (CV) Products

The CV products articulate the capability requirements, the delivery timing, and the deployed capability.

9.3 Role of Data and Information Viewpoint (DIV) Products

The DIV products articulate the data relationships and alignment structures in the architecture content for the capability and operational requirements, system engineering processes, and systems and services. The DIV products depict a set of HRM data entities and their relationship, including their key attributes. They also include data entities from other business areas as they relate to HR.

9.4 Role of Operational Viewpoint (OV) Products

The OV products describe HRM business processes, tasks and activities, operational elements, and information exchanges and flows required to accomplish the P&R mission. The OV products describe the nodes and activities of the HRM business processes as well as the information exchanges among nodes.

9.5 Role of the Systems Viewpoint (SV) Products

The SV products describe and graphically portray HRM systems, system interfaces, and information exchanges supporting the HRM. The SV products provide a transformational perspective depicting a baseline of the functional information requirements.

9.6 Role of the Standards Viewpoint (StdV) Products

The StdV products describe the minimal set of rules governing the arrangement, interaction, and interdependence of HRM system parts or elements, whose purpose is to ensure that a conformant

system satisfies a specified set of requirements. The StdV specifies systems data format, interfaces, and protocols used to build the systems architecture. The Standards Architecture includes DoD, HRM, and industry standards, policies, and guidance.

9.7 HRM EA Products

The following architectural products have been maintained and developed for the current version of the HRM Architecture:

Table 9-1 *HRM Current and Planned DoDAF Products*

VIEWPOINT	VIEWPOINT NAME	DESCRIPTION
AV-1	Overview and Summary Information	The HRM Overall AV-1 defines the purpose, scope, objectives, and architectural approach necessary to integrate the HRM Enterprise Architecture. The AV-1 will identify the Key Performance Parameters (KPP), core processes and relationships to other architectures, and limitations and constraints.
AV-2	Integrated Dictionary	The HRM AV-2 is a dictionary of terms for each architecture product. In every architectural release, the AV-2 is updated to include added, deleted, or changed names and definitions for all objects in the encyclopedia. The AV-2 is broken out by product for ease of use.
CV-2	Capability Taxonomy	The HRM CV-2 depicts a hierarchy of capabilities which specifies all the capabilities that are referenced throughout one or more Architectural Descriptions.
DIV-2	Logical Data Model	The HRM DIV-2 depicts a set of HRM data entities and their relationship, including their key attributes. It also includes data entities from other business areas as they relate to HR.
OV-1	High-Level Operational Concept Graphic	The HRM OV-1 depicts a high-level graphical/textual description of the operational concept.
OV-2	Operational Resource Flow Description	The HRM OV-2 depicts the HRM roles and the interactions among those roles necessary for the execution of HRM Capabilities.
OV-3	Operational Resource Flow Matrix	The HRM OV-3 details the interactions illustrated in the HRM OV-2. The OV-3 includes characteristics of the information exchange such as the description, the source and destination node, and the source and destination operational activity.
OV-5a	Operational Activity Decomposition Tree	The HRM OV-5a describes the activities that are performed to support HRM business capabilities, operational activities, and relationships among activities.
OV-5b	Operational Activity Model – IDEF0	The HRM OV-5b Integrated Computer Aided Manufacturing Definition for Function Modeling (IDEF0) describes capabilities, operational activities (or tasks), Input/Output (I/O) flows between activities, and I/O flows to/from activities that are outside the scope of the architecture. Additional data can show cost, performers or other pertinent information.

VIEWPOINT	VIEWPOINT NAME	DESCRIPTION
OV-6a	Operational Rules Model	The HRM OV-6a outlines the high-level DoD laws and regulations that identify business rules contained in the HRM Enterprise Standards (ES) that constrain operations to the HRM architecture.
OV-6c	Business Process Model	The HRM OV-6c describes the processes that are performed to support a specific HRM Capability. [Note: HRM used the business process modeling notation (BPMN) in developing the OV-6c in accordance with the April 4, 2011 memorandum "Use of End-to-End (E2E) Business Models and Ontology in DoD Business Architectures".] HRM EA contains three process model types: High-Level (HL), Business Process Standard (BPS), and Context process models. The **HL Process Model** is a sequential depiction of the leaf-level operational activities contained in the OV-5a. The **Low-Level (LL) Process Model** depicts the lowest level of details for the activities depicted in the HL model. The LL models contain tasks that can no longer be broken down or are at its atomic level from an enterprise perspective. The **BPS Process Model** is dictated by HRM ES which show a sequence of events that must be performed as directed by laws, policies and regulations. The **Context Process Model** depicts the scope and contents of the capability and the possible sequence of events that may be performed in that area. The BPS and Context process models are LL process models.
StdV-1	Standards Profile	The HRM StdV-1 includes the standards for Military Health Services (MHS) as well as Defense Travel System (DTS). For MHS, the standards provided identify standards that are relevant to the design and operation of MHS IT systems and are intended to establish uniform engineering and technical requirements for processes, procedures, practices, and methods.
SV-1	Systems Interface Description	The HRM SV-1 shows alignment of systems to HRM Capabilities they support and are color-coded by DoD Component for improved visibility of system ownership.
SV-4	Systems Functionality Description	The HRM SV-4 illustrates decomposition of system functions (logical) which support HRM Capabilities and Sub-Capabilities.
SV-5a	Operational Activity to System Function Traceability Matrix	The HRM SV-5a is a matrix which maps Operational Activities and System Functions within HRM Capabilities and Sub-Capabilities.
SV-5b	Operational Activity to Systems Traceability Matrix	The HRM SV-5b is a matrix which maps systems back to operational activities.
Ontology FM	Ontology Fact Model	The Ontology Fact Model (FM) is a matrix which describes, in a formally structured way, key concepts ("classes") pertinent to the business area being analyzed. The FM also formally describes the relationships between classes and the data properties associated with the classes.

VIEWPOINT	VIEWPOINT NAME	DESCRIPTION
CVT	Common Vocabulary and Thesaurus	The CVT defines the key terms used in the HRM ontology, identifies any known synonyms, and provides traceability to the laws, regulations, and policies (LRP) or EA product from which the definition was derived.
RTM	Related Term Matrix	The RTM is a matrix which identifies and associates the differing synonymous or near-synonymous terms used in various HRM products (EA, Enterprise Standards, CHRIS, Ontology).

10. CUSTOM PRODUCTS

10.1 BEA Alignment

The HRM OV-5 is an extension of the BEA OV-5. The HRM OV-5 contains additional activities not reflected in the Business Enterprise Architecture (BEA). The activities not captured in BEA are color-coded in the HRM OV-5 Node Tree and IDEF0 models.

The BEA OV-2 represents HRM as an operational role called "HRM." The HRM OV-2 decomposes this operational role into several operational roles needed to support the HRM OV-5 LoB. These main operational roles are further decomposed into sub-roles to support specific business areas.

The HRM OV-5 IDEF0 models do not show all the systems shown in the HRM SV-1. HRM followed BEA methodology to only reflect enterprise systems as mechanisms in the OV-5 IDEF0 model.

The HRM CHRIS to IE Mapping matrix was produced to show alignment of the CHRIS to the IEs contained in the HRM OV-5b (IDEF0) models. The CHRIS to IE mapping information is provided to the BEA for integration.

The Strategic Management Plan (SMP) to Operational Activity Mapping matrix was produced to show how the SMP measures are aligned to the HRM EA. The SMP measures to Operational Activity mapping information is provided to BEA for integration.

11. TOOLS AND FILE FORMATS USED

Operational Viewpoint and All Viewpoint Products:

- Rational® System Architect® for EA Products
- Rational® Suite Analyst
- Microsoft Office Suite (Word, Excel, Access, PowerPoint).

Systems Viewpoint **Products:**

- Rational® System Architect® for EA Products
- Rational® Suite Analyst
- Microsoft Office Suite (Word, Excel, Access, PowerPoint).

Standards Viewpoint **Products:**

- Rational® System Architect® for EA Products
- Microsoft Office Suite (Word, Excel, Access, PowerPoint).

12. FINDINGS AND RECOMMENDATIONS

Findings and recommendations are developed based on the architecture efforts captured in each release. Please refer to the release specific AV-1 for further details.

APPENDIX A – KEY PERFORMANCE PARAMETERS LISTING

FUNCTIONAL AREA	CAPABILITY	REQUIREMENT
Interoperability	Satisfy Critical Information Exchange Requirements (IER) Attributes	Systems shall satisfy all critical IER attributes to the threshold level (Threshold, KPP) and satisfy all IER attributes to the objective level (Objective, KPP).
Store	Data Interoperability	All of a system's data that will be exchanged, or has the potential to be exchanged, shall be tagged in accordance with the Joint Technical Architecture (JTA) standard for tagged data items (e.g., Extensible Markup Language [XML], the current JTA standard), and tags shall be registered in accordance with the DoD XML Registry and Clearinghouse policy and implementation plan (Threshold, KPP).
Transport	Quality of Service	Transport systems shall provide Quality of Service (QoS) capabilities that ensure that information identified as priority is delivered ahead of regular traffic 99% of the time (Threshold, KPP) and 99.9% of the time (Objective, KPP).
	Information Integrity	Systems shall maintain and guarantee during transport the integrity of all information elements exchanged throughout the GIG to enable user confidence; information integrity shall be 99.99 % (Threshold, KPP) and 99.999 % (Objective, KPP).
	Transport Element Status	All transport elements (e.g., switches, routers) shall be capable of providing status changes to network management devices by means of an automated capability in near real time 99% (Threshold, KPP) and 99.9% (Objective, KPP) of the time.
	Secure Voice Interoperability	Strategic and tactical secure voice systems shall be interoperable, with a 99% (Threshold, KPP) and 99.9% (Objective, KPP) call throughput success rate.
Network Management (NM)	Network Status	Systems shall have an automated NM capability to obtain status of networks and associated assets in near real time 99% (Threshold, KPP) and 99.9% (Objective, KPP) of the time.
Internet Download Manager (IDM)	Search Driven Information	Systems shall have an IDM capability to acquire needed information by search queries, with successful searches yielding 85% of available, needed information based on the user query and with no more than 20% being irrelevant/unusable (waste) or failed searches (Threshold, KPP); and yielding 95% of available, needed information and no more than 10% being irrelevant/unusable (waste) or failed searches (Objective, KPP).
	Survival Information Dissemination	Systems shall have an IDM capability that, utilizing a standard schema, IAW the commanders' dissemination policies and user profiles, will support the means for prioritization of information flows within a theater, using theater apportioned resources, and enable dissemination of survival information (limiting survival information to less than 12 kb) within the timeframes by 95% of the time (Threshold, KPP) and 0.5 seconds 95% of the time (Objective, KPP).

FUNCTIONAL AREA	CAPABILITY	REQUIREMENT
Information Assurance	Authentication/ Confidentiality/ Non-repudiation	Systems shall meet and maintain minimum Information Assurance (IA) Defense in Depth standards, including certification and accreditation IAW the DoD Information Technology Security Certification and Accreditation Process (DITSCAP) process (e.g., Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 6510.01C (May 1, 2001), DoD Instruction (DoDI) 5200.40 (December 30, 1997)) (Threshold, KPP).